

Listing of Claims

1. (Previously Presented) A method of driving a plasma display panel, comprising:
  - applying a rising pulse to a scan electrode during a set-up interval of an initialization period, wherein the rising pulse changes to a second voltage after the rising pulse has changed to a first voltage, wherein the second voltage is higher than the first voltage;
  - applying a falling pulse to a scan electrode during a set-down interval of the initialization period, wherein the falling pulse changes to a fourth voltage after the falling pulse has changed to a third voltage, wherein the third voltage is higher than the fourth voltage;
  - applying a first waveform to a sustain electrode during a first time interval that is a portion of the set-up interval included in an initial sub-field of one frame; and
  - applying a second waveform to the sustain electrode during a second time interval that is a portion of the set-up interval of all or fewer than all of the remaining sub-fields following the initial sub-field, wherein
    - the first waveform is different from the second waveform, such that the sustain electrode is electrically floated in the first waveform during the first time interval that is a portion of the set-up interval, and
    - the second waveform applied to the sustain electrode has a predetermined non-zero slope different from a non-zero slope of the first electrically floated waveform, the second waveform applied during the second time interval that is a portion of the set-up interval of all or fewer than all of the remaining sub-fields,
      - wherein the non-zero slope of the first electrically floated waveform is greater

than the predetermined non-zero slope of the second waveform,

wherein the first waveform has a maximum peak voltage greater than a maximum peak voltage of the second waveform, and

wherein each of the remaining sub-fields other than the initial sub-field has a higher brightness weighting value than the initial sub-field.

2. (Original) The method as claimed in claim 1, wherein said initial sub-field is at least one sub-field including the first sub-field of said frame.

3. (Original) The method as claimed in claim 2, wherein said initial sub-field is the first and second sub-fields of said frame.

4. (Canceled)

5. (Previously Presented) The method as claimed in claim 1, wherein the set-up interval is for forming wall charges within one or more cells by a writing discharge, and the set-down interval is for erasing a portion of said wall charges by an erasure discharge.

6. (Currently Amended) The method as claimed in claim 5, wherein wall charges within said one or more cells are formed by [[a]] the writing discharge during the set-up interval in each initialization period of the remaining sub-fields other than the initial sub-field, and wherein in the set-down interval in each initialization period of the remaining sub-fields a portion of said wall charges are erased by an erasure discharge.

7. (Previously Presented) The method as claimed in claim 1, wherein the sustain electrode is electrically floated during a shorter time than said first time interval in the set-up interval.

8-31 (Canceled)

32. (Previously Presented) The method as claimed in claim 1, wherein the initial sub-field has a brightness weighting value less than one half a maximum brightness weighting value.

33. (New) The method as claimed in claim 1, wherein each of the first waveform, which is applied to the sustain electrode during the first time interval that is a portion of the set-up interval included in the initial sub-field of said one frame, and the second waveform, which is applied to the sustain electrode during the second time interval that is a portion of the set-up interval of all or fewer than all of the remaining sub-fields following the initial sub-field, prevents a discharge between the scan electrode and the sustain electrode during respective ones of the first and second time intervals.

34. (New) The method as claimed in claim 33, wherein:

the second waveform applied to the sustain electrode has a predetermined positive non-zero slope different from a positive non-zero slope of the first electrically floated waveform, the second waveform applied during the second time interval that is a portion of the set-up interval of all or fewer than all of the remaining sub-fields,

the positive non-zero slope of the first electrically floated waveform is greater than

the predetermined positive non-zero slope of the second waveform,

the first waveform has a maximum positive peak voltage greater than a maximum positive peak voltage of the second waveform,  
each of the remaining sub-fields other than the initial sub-field has a higher brightness weighting value than the initial sub-field.

35. (New) The method as claimed in claim 34, wherein the set-up interval is for forming wall charges between the scan electrode and an address electrode within one or more cells by a writing discharge, and the set-down interval is for erasing a portion of said wall charges by an erasure discharge.

36. (New) The method as claimed in claim 34, wherein the first waveform reaches said maximum peak voltage after the first waveform has changed along said corresponding predetermined non-zero slope, and wherein the second waveform reaches said maximum peak voltage after the second waveform has changed along said corresponding predetermined non-zero slope.

37. (New) The method as claimed in 34, wherein the first and second waveforms have positive non-zero slopes that are substantially linear.